

STATE OF CALIFORNIA  
DEPARTMENT OF PUBLIC HEALTH

IN RE: LEMOORE NAVAL AIR STATION  
Water System No. 1610700

TO: Mr. Kevin Norton, Public Works Officer  
Lemoore Naval Air Station  
750 Enterprise Avenue  
Lemoore, CA 93246

CC: Kings County Environmental Health Services Department

CITATION FOR NONCOMPLIANCE  
TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL VIOLATION  
March 2014

Issued on May 8, 2014

Section 116650, Chapter 4, Part 12, Division 104 of the California Health and Safety Code (CHSC), authorizes the issuance of a citation for failure to comply with a requirement of the California Safe Drinking Water Act, or any regulation, standard, permit, or order issued hereunder.

**VIOLATION**

The Drinking Water Field Operations Branch of the Department of Public Health (hereinafter ‘Department’) hereby issues a Citation to Lemoore Naval Air Station (hereinafter ‘Water System’) for failure to comply with Section 116555(a)(1) of the CHSC and Section 64426.1(b)(2) of Title 22, California Code of Regulations (CCR). Specifically,



1 the Water System (mailing address: 750 Enterprise Avenue, Lemoore, CA 93246) failed to  
2 comply with the Total Coliform Maximum Contaminant Level (MCL) for the month of  
3 March 2014.

4

5 Section 64426.1(b)(2) specifies that a public water system collecting fewer than 40 samples  
6 per month is in violation of the total coliform MCL when more than one sample collected  
7 during any month is total coliform-positive.

8

9 The Water System is required to collect a minimum of three (3) distribution system  
10 bacteriological samples per week. The bacteriological water analysis results submitted by  
11 the Water System reported the presence of total coliform bacteria in two (2) of nineteen  
12 (19) samples collected by the Water System in March 2014. None of the positive samples  
13 showed the presence of fecal coliform or *E. coli* bacteria.

14

15 Upon being informed of the presence of total coliform bacteria in two (2) routine samples  
16 collected on March 11, 2014, Water System staff collected a total of six (6) repeat samples  
17 on March 13, 2014; one (1) set of three (3) repeats for each respective routine sample.  
18 None of the repeat samples showed the presence of total coliform bacteria. Due to the  
19 above-mentioned total coliform positive samples, the Water System failed the total coliform  
20 MCL for the month of March 2014. All water samples for coliform bacteria collected from  
21 the distribution system during March 2014 are summarized in Attachment A.

22

23 The cause of the failure is inconclusive based on the investigation conducted by the Water  
24 System's staff (see Attachment B). The Water System is a community water system that  
25 supplies water for domestic purposes to a community population of approximately 11,500  
26 persons through 1,799 service connections. The Water System utilizes surface water from  
27



1 the California Aqueduct and therefore provides for continuous disinfection of the  
2 distribution system.

3

4 According to Department records, the water from the treated effluent has been routinely  
5 analyzed for total coliform bacteria since at least 2002. The treated effluent bacteriological  
6 sampling conducted during the month of March 2014 revealed the presence of total  
7 coliform bacteria in two (2) treated effluent samples collected on March 4 and March 11,  
8 2014. It appears that investigative samples were collected in the distribution system on  
9 March 6 and March 13, 2014 in response to the treated effluent positive results. Although  
10 both of these results did not detect the presence of total coliform bacteria, the routine  
11 distribution samples from March 11 were positive for total coliform bacteria. This would  
12 be the same day that the treated effluent also detected the presence of total coliform  
13 bacteria. All water samples for coliform bacteria collected from the source and treated  
14 effluent locations are summarized in Attachment B.

15

16 **NOTIFICATION REQUIREMENTS**

17 Section 64426.1(c) requires a public water system to notify the Department and the  
18 consumers of the water system, when a violation of Section 64426.1(b)(1) through (4) the  
19 total coliform MCL occurs. Notification to the Department shall be by the end of the  
20 business day on which the violation has been determined. If the Department is closed,  
21 notification shall be within 24 hours of the determination. The Department was notified on  
22 March 13, 2014, in accordance with the above-referenced section.

23

24 A Tier 2 Public Notice for violations of paragraphs 64426.1(b)(2) shall be given pursuant  
25 to Section 64463.4 [lists method, time-frame and delivery] and 64465 [content & format].  
26 The Tier 2 Public Notice shall include the mandatory health effects language from  
27 Appendix 64465-A for a total coliform MCL failure.



1  
2 Section 64463.4 allows community water systems to use mail or direct delivery to each  
3 customer and the use of one or more of the following methods: publication in a daily or  
4 weekly newspaper, posting the public notice in a conspicuous public place within the water  
5 system or on the internet, or by delivery to community organizations. The Water System  
6 may publish the public notice once in a daily or weekly newspaper available in the general  
7 service area. The Department hereby waives public notification by mail or direct delivery.  
8

9 Section 116450(g) requires that upon receipt of notification from a public water system,  
10 schools must notify school employees, students, and parents (if the students are minors),  
11 residential rental property owners or managers (including nursing homes and care facilities)  
12 must notify their tenants and business property owners, managers or operators must notify  
13 employees of businesses located on the property. These secondary notification  
14 requirements are also included in the public notice.

15  
16 Notification of the public was conducted on April 11, 2014 advising each customer of the  
17 failure of the total coliform MCL during the month of March 2014. A copy of the notice  
18 that was published in the Lemoore Navy News is provided as Attachment C. Proof of  
19 notification is provided as Attachment D.

20  
21 **DIRECTIVES**

22 The Lemoore Naval Air Station has completed the necessary public notification and  
23 investigation.



1      **CIVIL PENALTIES**

2      Sections 116650(d) and 116650(e) of the CHSC allow for the assessment of a civil penalty  
3      for failure to comply with requirements of the California Safe Drinking Water Act. Failure  
4      to comply with any provision of this Citation may result in the Department imposing an  
5      administrative penalty of not less than \$100 (one hundred dollars) per day as of the date of  
6      violation of any provision of this Citation.

7

8

9

10     May 8, 2014

11     Date

*Tricia A. Wathen*

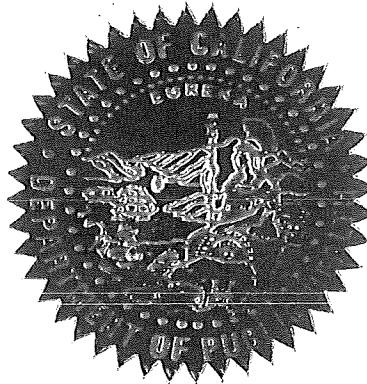
12     Tricia A. Wathen, P.E.  
13     Senior Sanitary Engineer, Visalia District  
14     DRINKING WATER FIELD OPERATIONS BRANCH

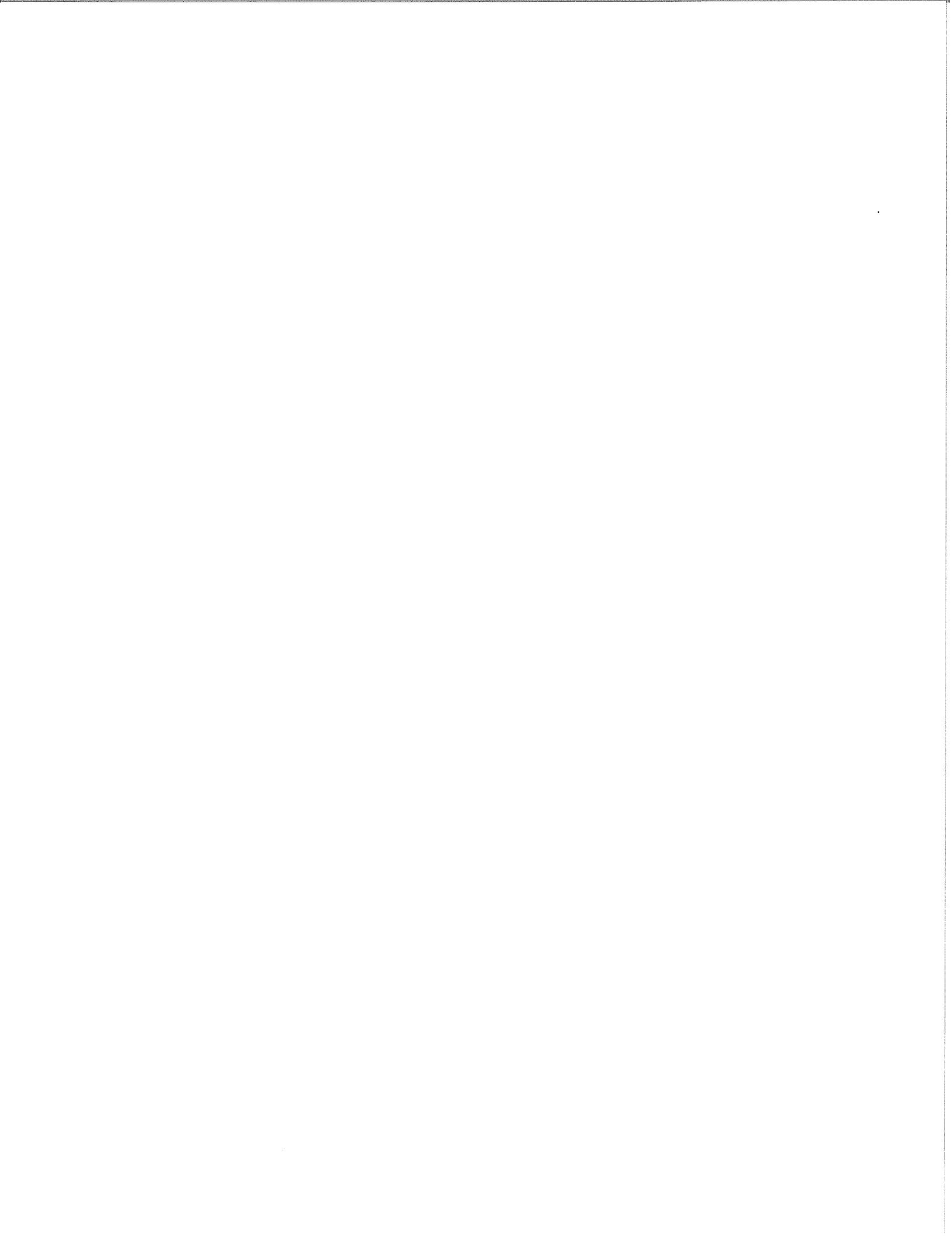
15     TW/LR

16     **Attachments:**

- 17     Attachment A: Summary of Distribution Bacteriological Sampling for March 2014  
18     Attachment B: Summary of Source Bacteriological Sampling from Jan. 2014 to March 2014  
19     Attachment C: Positive Total Coliform Investigation – Surface Water System  
20     Attachment D: Public Notice  
21     Attachment E: Proof of Notification Form

22     03-12-14C-008-1610700-22 TCRMCL Mar-2014Cit ID 5-8-14





## Bacteriological Distribution Monitoring Report

**1610700 Lemoore Naval Air Station      Distribution System Freq: 3W**

Sample Date	Location	T Coli	E Coli	F Coli	HPC	Type	Cl2	Viol. Avg	GWR Type	Satisfied?	Comments
3/1/2014	10 Samples	A	A			Routine	0.10-2.03	0.39			
3/6/2014	722 Distribution	A	A			Other	2.03				
3/11/2014	2544A Kennedy	P	A		<1	Routine	0.30		MCL		
3/11/2014	977 Jet Mart	P	A		17	Routine	0.27				
3/13/2014	722 Distribution	A	A			Other	1.12				
3/13/2014	3122A Privateer	A	A		<1	Repeat	0.21				
3/13/2014	965 Child Care Center	A	A		2.0	Repeat	0.22				
3/13/2014	977 Jetmart	A	A		1.0	Repeat	0.31				
3/13/2014	2544A Kennedy	A	A		1.0	Repeat	0.34				
3/13/2014	2545A Kennedy	A	A		<1	Repeat	0.32				
3/13/2014	2546A Kennedy	A	A		<1	Repeat	0.30				

### Violation Key

MCL	Exceeds the maximum contaminant level	MR5	Incorrect number of repeat samples as follow-up to a positive sample
MR1	No monthly sample for the report month	MR6	No source sample
MR2	No quarterly sample for the report month	MR7	No summary report submitted
MR3	Incorrect number of routine samples for the report month	MR8	Other comments and/or info
MR4	Did not collect 5 routine samples for previous month's positive sample	MR9	Cl2 not reported

# Source Bacteriological Monitoring Report

**1610700 Lemoore Naval Air Station**

Sample Date	Time	Source	Sample Type	Test Method	T Coli	E Coli	F Coli	HPC	Violation	Comments
3/25/2014	8:40	722-Raw	Surface	MPN	8.7	<1				
3/25/2014	8:45	722-Trtd	Treatment	P/A	A	A				No CL2 reported
3/18/2014	8:30	722-Raw	Surface	MPN	8.7	<1				
3/18/2014	8:35	722-Trtd	Treatment	P/A	A	A		1.0		CL2=1.83
3/13/2014	10:15	722-Trtd	Treatment	P/A	A	A		2.0		CL2=1.69
3/11/2014	8:30	722-Raw	Surface	MPN	9.9	<1				
3/11/2014	8:38	722-Trtd	Treatment	P/A	P	A		5.0		CL2=1.94
3/6/2014	11:10	722-Trtd	Treatment	P/A	A	A		<1		CL2=2.01
3/4/2014	9:20	722-Raw	Surface	MPN	8.7	<1				
3/4/2014	9:20	722-Trtd	Treatment	P/A	P	A		<1		CL2=1.45
2/25/2014	6:50	722-Raw	Surface	MPN	4.2	<1				
2/18/2014	9:00	722-Raw	Surface	MPN	4.2	<1				
2/11/2014	8:45	722-Raw	Surface	MPN	5.3	<1				
2/4/2014	9:10	722-Raw	Surface	MPN	11	<1				
2/1/2014		722-Trtd: 4 Samples (same dates as Raw)	Treatment	P/A	A	A		<1		CL2=1.47-1.53
1/28/2014	6:25	722-Raw	Surface	MPN	5.3	<1				
1/21/2014	7:00	722-Raw	Surface	MPN	5.3	<1				
1/14/2014	9:10	722-Raw	Surface	MPN	30	<1				
1/7/2014	7:30	722-Raw	Surface	MPN	6.4	<1				
1/1/2014		722-Trtd: 4 Samples (same dates as Raw)	Treatment	P/A	A	A		<1-1		CL2=1.33-1.69
12/1/2013		722-Trtd: 5 samples (same dates as Raw)	Treatment	P/A	A	A		<1-1		
12/1/2013		722-Raw: 5 Samples (same dates as Raw)	Surface	MPN	4.2-23	<1-1				
11/1/2013		722-Trtd: 4 Samples (same dates as Raw)	Treatment	P/A	A	A		<1-4		
11/1/2013		722-Raw	Surface	MPN	>200	<1-1				
10/29/2013	9:30	722-Raw	Surface	MPN	20	<1				
10/22/2013	8:50	722-Raw	Surface	MPN	27	<1				
10/15/2013	9:30	722-Raw	Surface	MPN	40	<1				
10/8/2013	9:30	722-Raw	Surface	MPN	120	<1				
10/1/2013		722-Trtd: 5 samples (same dates as raw)	Treatment	P/A	A	A		<1-3		
10/1/2013	9:30	722-Raw	Surface	MPN	>200	<1.1				
9/24/2013	9:30	722-Raw	Surface	MPN	>200	<1				
9/17/2013	9:30	722-Raw	Surface	MPN	>200	<1				
9/10/2013	9:30	722-Raw	Surface	MPN	>200	<1				
9/3/2013	9:30	722-Raw	Surface	MPN	>200	1.0				
9/1/2013		722-Trtd: 4 samples (same dates as Raw)	Treatment	P/A	A	A		<1		
8/27/2013	8:30	722-Raw	Surface	MPN	>200	<1				
8/20/2013	9:30	722-Raw	Surface	MPN	>200	<1				

**1610700 Lemoore Naval Air Station**

<b>Sample Date</b>	<b>Time</b>	<b>Source</b>	<b>Sample Type</b>	<b>Test Method</b>	<b>T Coli</b>	<b>E Coli</b>	<b>F Coli</b>	<b>HPC</b>	<b>Violation</b>	<b>Comments</b>
8/13/2013	9:30	722-Raw	Surface	MPN	>200	<1				
8/6/2013	9:30	722-Raw	Surface	MPN	>200	<1				
8/1/2013		722-Trtd: 4 samples (same date as Raw)	Treatment	P/A	A	A		<1 to 1.0		c/2 = 1.22-1.95
7/30/2013	9:30	722-Raw	Surface	MPN	<1	<1				
7/23/2013	9:30	722-Raw	Surface	MPN	>200	2.0				
7/16/2013	9:00	722-Raw	Surface	MPN	>200	<1.1				
7/9/2013	9:30	722-Raw	Surface	MPN	>200	<1				
7/2/2013	9:35	722-Raw	Surface	MPN	>200	2.0				
7/1/2013		722-Trtd - 5 samples	Treatment	P/A	A	A				
6/25/2013	10:05	722-Raw	Surface	MPN	200	1.0				
6/18/2013	9:10	722-Raw	Surface	MPN	140	1.0				
6/11/2013	8:34	722-Raw	Surface	MPN	170	4.2				
6/4/2013	10:00	722-Raw	Surface	MPN	71	1.0				
6/1/2013		722-Trtd - 4 samples	Treatment	P/A	A	A				
5/28/2013	8:05	722-Raw	Surface	MPN	59	3.1				
5/21/2013	8:00	722-Raw	Surface	MPN	>200	5.3				
5/14/2013	8:00	722-Raw	Surface	MPN	>200	7.5				
5/7/2013	9:00	722-Raw	Surface	MPN	>200	5.3				
5/1/2013		722-Trtd: 4 samples	Treatment	P/A	A	A				
4/23/2013	11:03	722-Raw	Surface	MPN	170	4.2				
4/16/2013	9:00	722-Raw	Surface	MPN	>200	1.0				
4/9/2013	9:15	722-Raw	Surface	MPN	59	1.0				
4/2/2013	9:00	722-Raw	Surface	MPN	20	<1				
4/1/2013		722-Trtd: 4 samples	Treatment	P/A	A	A				
3/28/2013	12:00	T-760 Distribution	Treatment	P/A	A	A				
3/28/2013	12:50	T-760 Utilities	Treatment	P/A	A	A				
3/26/2013	9:00	722-Raw	Surface	MPN	20	<1				
3/19/2013	9:20	722-Raw	Surface	MPN	6.4	<1				
3/12/2013	9:20	722-Raw	Surface	MPN	5.3	<1				
3/5/2013	9:00	722-Raw	Surface	MPN	8.7	<1				
3/1/2013		722-Trtd: 5 samples	Treatment	P/A	A	A				

**POSITIVE TOTAL COLIFORM INVESTIGATION – SURFACE WATER SYSTEM**

This form is intended to assist public water systems in completing the investigation required by the California Department of Public Health (Section 64426(b) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

**ADMINISTRATIVE INFORMATION**

PWS Name:	NAVAL AIR STATION LEMOORE	PWSID NUMBER:	CA1610700
Name	Name	Address	Telephone #
Operator in Responsible Charge (ORC)	Vacant/Under Recruitment	722 Enterprise Ave., Lemoore, CA 93246	(559) 998-3806
Person that collected TC samples if different than ORC	GREG GAXIOLA	722 Enterprise Ave., Lemoore, CA 93246	(559) 998-3806
Owner	NAVAL AIR STATION	750 Enterprise Ave., Lemoore, CA 93246	(559) 998-4091
Certified Laboratory for Microbiological Analyses	BC Laboratories, Inc.	4100 Atlas Court, Bakersfield, CA 93308	(661) 327-4911
Date Investigation Completed:	April 18, 2014		
Name of Month(s) and Year of Total Coliform MCL Failure:	March 2014		

**INVESTIGATION DETAILS**

SOURCE – RAW SURFACE WATER	SOURCE NAME	COMMENTS
1. Inspect the surface water intake for physical defects and report	Information Unavailable	Westlands Water District controls access.
2. Is the intake secured to prevent unauthorized access?	Information Unavailable	Westlands Water District controls access.
3. To what treatment plant (name) is the water supplied from this intake?	Naval Air Station Lemoore	
4. How often do you collect a total coliform (TC) sample from the raw water?	One/Week	
5. Provide the date and result of the last TC test at this location	April 15, 2014	
6. Is there any unusual condition at the intake?	Information Unavailable	Westlands Water District controls access.
7. Any additional observation?	Information Unavailable	Westlands Water District controls access.

TREATMENT	PLANT NAME	COMMENTS
PRE-FILTRATION TREATMENT	NAVAL AIR STATION LEMOORE	
1. Do you provide any treatment prior to filtration?	Yes	
2. If yes, specify type of treatment provided.	coagulation/solids removal	
3. Did you experience any problems with the pre-filtration treatment when the total coliform MCL happened? If yes, specify.	No	
4. Do you provide pre-chlorination?	No	
5. Specify the point of pre-chlorination?	After Filtration	

# POSITIVE TOTAL COLIFORM INVESTIGATION

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TREATMENT	PLANT NAME	COMMENTS
6. Was the chlorination system working properly when the TCR MCL was violated?	Yes	No issues noted. Injection systems are working. Modifications planned to dampen swings in injected quantity of chlorine.
7. Have you recently changed the pre-chlorination dosage?	At that time - No	
8. Any additional observation, information?	-	
<b>FILTRATION TREATMENT</b>		
1. What kind of filters do you have (Pressure or Gravity, Media specifications)	Gravity mixed media - GAC (4)	
2. How many filters are there?	260 ft <sup>2</sup>	
3. What is the capacity of each filter (gpm per sq ft)?	7.5 MGD	
4. What is the capacity of the treatment plant in gpm?	1300 GPM	
5. What is the filter loading rate for each filter?		
6. How many filters were in service when the total coliform MCL failure happened?	3	
7. Did any filter experience any operational problems when the failure happened?	No	
8. Did you experience any problems with the filter backwashing process?	No	
9. Did the combined effluent from the treatment plant experience any turbidity failures when the total coliform MCL failure happened?	No	
10. Did any individual filter exceed the turbidity standard when the failure happened?	No	
11. How often do you backwash your filters? Is it based on a timer or effluent turbidity?	One Filter/Shift – 2 per day	
12. Are the filters backwashed with treated water? Specify backwash rate and duration.	Yes. 3,000 GPM/8 min; 5,500 GPM/10	Followed by another low rate @ = 3,000 GPM.
11. When was the last time you inspected your filter media?	2011	
13. When was the last time you changed your filter media?	2011	
14. Did you notice any mud balls in the filters when you last inspected your filters?	No	
15. Any additional observation, information?	-	
<b>DISINFECTION TREATMENT</b>		
1. What kind of disinfectant do you add?	Sodium Hypochlorite	
2. Where do you add the disinfectant (specify location)?	Clearwell	
3. What was the chlorine residual in the treatment plant effluent?	1.94 ppm	
4. What was the chlorine residual in the distribution system?	0.13 – 0.93 ppm	
5. Did the treatment plant effluent lose chlorine residual? If yes, how long?	No	
6. Did the distribution system lose chlorine residual? If yes, how long?	No	
7. If you provide continuous chlorination treatment, was there any equipment	Clearwell (733), Bldg. 50	No issues noted

# POSITIVE TOTAL COLIFORM INVESTIGATION

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TREATMENT	PLANT NAME	COMMENTS
failure?		
8. Inspect each point where disinfectant is added and report		
a. For hypochlorination systems		
1) Is the disinfectant feed pump feeding disinfectant?	Yes	
2) What is the feed rate of disinfectant in ml/minute?	$\sim = 160 \text{ ml/min}$	
3) What is the concentration of the disinfectant solution being fed? (percent, or mg/l of chlorine as HOCl)	13.5% NaOCl	
4) By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)	Manufacturer's Lit.	
5) What is the age (days) of the disinfectant solution currently being used at this treatment location?	$\sim = 15 \text{ Days}$	
6) What is the raw water flow rate at the point where disinfectant is added in gallons per minute?	$\sim = 3,200 \text{ GPM}$	
7) What is the total chlorine residual measured immediately downstream from the point of application?	1.5 ppm	
8) What is the free chlorine residual measured immediately downstream from the point of application?	2.0 ppm	
9) What is the contact time in minutes from the point of disinfectant application to the CT compliance point?	$\sim = 27 \text{ min}$	@ 5 MGD Rate
10) Did the treatment plant experience any CT failure due to inadequate chlorine dosage? If yes, specify what happened?	No	
11) Did the treatment plant experience any CT failure due to inadequate contact time? If yes, specify what happened?	No	
12) Any additional observation/information?		

STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
	# 4	# 6	# 1 - 3	# 52 - 53	
1. Is each tank locked to prevent unauthorized access?	Yes	Yes	Yes	Yes	
2. Are all vents of each tank screened and down-turned to prevent dust and dirt from entering the tank?	Yes	Yes	Yes	Yes	
3. Is the overflow on each tank screened?	Yes	Yes	Yes	Yes	
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?	No	No	No	No	
5. Are there any visible leaks in the tanks? Is the exterior of the tank corroded?	No	No	No	No	
6. Is the roof/cover of the tank sealed and free of any leaks?	Yes	Yes	Yes	Yes	
7. Is the tank above ground or buried?	Above	Above	Above	Above	Elevated.

# POSITIVE TOTAL COLIFORM INVESTIGATION

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STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
a. If buried or partially buried, are there provisions to direct surface water away from the site?	# 4	# 6	# 1 – 3	# 52 - 53	
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?	Ground	Ground	Ground	Ground	
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?	N/A	N/A	N/A	N/A	Tanks 1 & 2 are scheduled to be cleaned & re-inspected.
9. What is the measured chlorine residual (total/free) of the water exiting the storage tank today?	Yes (OCT 2014)	Yes (FEB 2013)	Yes (OCT 2011)	Yes (JUN & SEP 2011)	
10. What is the volume of the storage tank in gallons? How old is the tank?	2.6 MG (1974)	2 MG (1999)	0.6 MG each (1960)	0.6 MK each (1960)	(Year Installed)
11. Is the tank baffled?	No	No	No	No	Item # 1-7 were checked & Will be checked & documented as part of future inspections.
12. Prior to the TC+ or EC+, what was the previous date items #1-7 were checked and documented?					

## SYSTEM RESPONSES

### DISTRIBUTION SYSTEM

- What is the minimum pressure you are maintaining in the distribution system? 70 psi
- Did pressure in the distribution system drop to less than 5 psi prior to experiencing the TCR positive finding? No
- Has the distribution system been worked on within the last week? (service taps, hydrant flushing, main breaks, main extensions, etc.) If yes, provide details. 3 Valves at Admin pump station replaced, installed and repaired, mutable backflow, and Auto Flushers in place.
- Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff? No
- Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak? No N/A
- If there was a mainline leak, when was it repaired? Auto flushers run daily in Operations Area.
- On what date was the distribution system last flushed? Yes. Procedure is under review.
- Is there a written flushing procedure you can provide for our review? Cross-connection Control Survey initiated/expected completion: 31OCT14. (Will be performed by contract.)
- Do you have an active cross connection control program? N/A
- What is name and phone number of your Cross-Connection Control Program

# POSITIVE TOTAL COLIFORM INVESTIGATION

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SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings) (JETMART)		Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify location)
1. What is the height of the sample tap above grade? (inches)	20 inches	20 inches	30 inches	27 inches	
2. Is the sample tap located in an <u>exterior</u> location or is it protected by an <u>enclosure</u> ?	Enclosed Sampling Station	Exterior Hose Bib	Exterior Hose Bib	Exterior Hose Bib	
3. Is the sample tap threaded, have a swing arm (kitchen sink) or aerator (sinks)?	No	Threaded	Threated	Threated	
4. Is the sample tap in good condition, free of leaks around the stem or packing?	Yes	Yes	Yes	Yes	
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?	Yes	Yes	Yes	Yes	
6. Is the sample tap and area around the sample tap clean and dry (free of animal droppings, other contaminants or spray irrigation systems)?	Yes	Yes	Yes	Yes	
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?	Yes	No Vegetation	No Vegetation	No Vegetation	
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)	Ran Water for 5 min.	Ran Water for 5 min.	Ran Water for 5 min.	Ran Water for 5 min.	
9. Is this sample tap designated on the sampling plan submitted with this information request?	Yes	Yes	Yes	Yes	
10. What were the weather conditions at the time of the positive sample (rainy, windy, sunny)?	Sunny	Sunny	Sunny	Sunny	
<b>GENERAL OPERATIONS:</b>		<b>Response</b>			
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC+ findings?		No			
2. Were there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located?		No			
3. Does the system have backup power or elevated storage?		No backup power, however diesel power fire/distribution pumps exist.			
4. During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?		No			
5. What were the symptoms of illness if you received complaints about customers being sick?		N/A			

# POSITIVE TOTAL COLIFORM INVESTIGATION

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DISTRIBUTION SYSTEM		SYSTEM RESPONSES	
Coordinator?			
11. Is the review and testing of backflow prevention devices current?	Yes		
12. On what date was the last physical survey of the system done to identify cross-connections?	10/2007		

BOOSTER STATION		SYSTEM RESPONSES	
1. Do you have a booster pump? How many?		2 in ADMIN Area backed up with 2 diesel fire pumper & 3 diesel fire pumpers in the Operations Area.	
2. Do you have a standby booster pump if the main pump fails?		Yes, see previous item.	
3. Prior to bacteriological quality problems, did your booster pump fail?	No		
4. Do you notice standing water, leakage at the booster station?	No		

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings) (Kennedy)		Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify location)
1. What is the height of the sample tap above grade? (inches)	19 inches	26 inches	30 inches		
2. Is the sample tap located in an <u>exterior</u> location or is it protected by an <u>enclosure</u> ?	Enclosed Sampling Station	Exterior Hose	Exterior Hose	Exterior Hose	
3. Is the sample tap threaded, have a swing arm (kitchen sink) or aerator (sinks)?	No	Threaded	Threaded	Threated	
4. Is the sample tap in good condition, free of leaks around the stem or packing?	Yes	Yes	Yes	Yes	
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?	Yes	Yes	Yes	Yes	
6. Is the sample tap and area around the sample tap clean and dry (free of animal droppings, other contaminants or spray irrigation systems)?	Yes	Yes	Yes	Yes	
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?	Yes	Yes	Yes	No Vegetation	
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.)	Ran Water for 5 min.	Ran Water for 5 min.	Ran Water for 5 min.	Ran Water for 5 min.	
9. Is this sample tap designated on the sampling plan submitted with this information request?	Yes	Yes	Yes	Yes	
10. What were the weather conditions at the time of the positive sample (rainy, windy, sunny)?	Sunny	Sunny	Sunny	Sunny	

# POSITIVE TOTAL COLIFORM INVESTIGATION

Page 6 of 7

<b>GENERAL OPERATIONS:</b>	<b>Response</b>
1. Were there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC+ findings?	No
2. Were there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located?	No
3. Does the system have backup power or elevated storage?	No backup power, however diesel power fire/distribution pumps exist.
4. During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	No
5. What were the symptoms of illness if you received complaints about customers being sick?	N/A

## **POSITIVE TOTAL COLIFORM INVESTIGATION**

Page 7 of 7

### **ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS**

1. Sketch of System showing all sources, all treatment and chlorination locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. A set of photographs of the source, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by our Department
3. Name, certification level and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections. Cross-connection Survey will be provided when completed. Completion date: October 31, 2014.

### **SUMMARY: BASED ON THE RESULTS OF YOUR INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM YOUR PUBLIC WATER SYSTEM?**

#### **SUMMARY OF FINDING:**

1. Weather conditions on March 11, 2014 were windy and dusty. (Please see attachment #1 - NOAA Climate Data).
2. Chlorine residual level at 977 Jet Mart was 0.27 and the Heterotrophic Plate Count was 17 CFU/ml. (Please see Attachment #2 - Lab Analysis)
3. Chlorine residual level at 2544A Kennedy was 0.30 and the Heterotrophic Plate Count was less than 1 CFU/ml. (Please see Attachment 2 - Lab Analysis.)
4. No significant related system deficiencies were noted in the investigation.

#### **CONCLUSIONS:**

Based on the above findings, it is our opinion that the positive coliform results were caused by wind borne microbial particles. Another possible cause in the realm of possibilities is improper sample collection techniques during windy conditions. As a precautionary measure, and to avoid or minimize any future repeat events, all Water Plant Operators will be provided retraining on proper water sample collection techniques.

### **CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE**

NAME: KUMAR G. DE SILVA TITLE: UTILITIES & ENERGY MANAGEMENT DATE: 4/18/14  
BRANCH HEAD

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA

(may be updated)

NOAA National Climatic Data Center

Station Location: NAVAL AIR STATION (23110)

LEMOORE, CA

Lat 36 333 Lon -119 95

Elevation(Ground): 232 ft above sea level

Month: 03/2014															
Elevation(0.0m), 2.22 ft. above sea level								Wind: Speed=mph Dir=tens of degrees							
Temperature (Fahrenheit)				Degree Days Base 65 Degrees				Sun				Snow/Ice on Precipitation Ground(in) (in)			
D a t e	Max.	Min.	Avg.	Dep From Normal	Avg. Dew pt.	Avg Wet Bulb	Heating	Cooling	Sunrise LST	Sunset LST	Significant Weather	Resultant Speed	Res Avg Dir Speed	max 5-second Speed	max 2-minute Speed
01	2	3	4	5	6	7	8	9	10	11	RA BR BR HZ HZ HZ BR HZ HZ	29.73	11.8	20	21
01	66	51	59	29	48	52	6	0	0630	1733	RA BR BR HZ HZ HZ BR HZ HZ	29.48	12.5	23	24
02	68	49	59	29	49	54	6	0	0629	1754	M	0.11	12.5	23	25
03	68	48	58	28	50	57	7	0	0628	1755	M	0.00	29.86	30.05	160
04	72	55	64	34	52	57	1	0	0626	1756	M	0.00	29.83	30.13	01
05	75	53	64	34	53	58	1	0	0625	1757	M	0.00	29.82	30.08	260
06	78	57	68*	37	51	57	0	3	0624	1758	M	T	29.83	30.08	03
07	72	46	59	28	45	51	6	0	0622	1759	M	0.00	29.86	30.12	06
08	77	44	61	30	44	52	4	0	0621	1760	M	0.00	29.91	30.17	07
09	79	53	66	35	47	55	0	1	0619	1801	M	0.00	29.89	30.15	10
10	78	47	63	31	45	54	2	0	0618	1802	M	0.00	29.85	30.11	09
11	71	48	60	28	38	49	5	0	0617	1803	M	0.00	29.82	30.07	11
12	78	44	61	29	34	48	4	0	0615	1803	M	Ts	29.77	30.03	11
13	83	46	65	32	32	48	0	0	0614	1804	M	0.00	29.75	29.99	12
14	82	42*	62	29	34	49	3	0	0612	1805	M	0.00	29.87	30.12	13
15	82	46	64	31	42	52	1	0	0611	1806	M	Ts	30.01	30.26	14
16	88*	46	67	34	38	52	0	2	0609	1807	M	0.00	29.96	30.22	15
17	76	54	65	31	39	52	0	0	0608	1808	M	0.00	29.75	30.01	16
18	75	45	60	26	32	47	5	0	0607	1809	M	0.00	29.68	29.93	17
19	84	44	64	30	32	49	1	0	0605	1810	M	0.00	29.77	30.02	18
20	84	47	66	32	37	52	0	1	0604	1811	M	0.00	29.71	29.96	19
21	84	50	67	32	37	52	0	2	0602	1811	M	0.00	29.65	29.90	20
22	81	45	63	28	38	51	2	0	0601	1812	M	0.00	29.76	30.01	21
23	83	49	66	31	35	55	0	1	0559	1813	M	0.00	29.83	30.08	22
24	87	44	66	30	36	54	0	1	0558	1814	M	0.00	29.80	30.05	23
25	80	52	66	30	37	52	0	1	0556	1815	M	0.00	29.64	30.00	24
26	67	47	57*	21	47	53	8	0	0555	1816	M	T	29.65	29.90	25
27	73	43	58	21	41	50	7	0	0553	1817	M	0.00	29.81	30.07	26
28	77	46	62	25	41	53	3	0	0552	1817	M	0.00	29.90	30.15	27
29	83s	50s	50s	22	45	54	M	M	0551	1818	M	0.25s	29.77	30.03	28
30	69	50s	50s	22	43	55	M	M	0549	1819	M	0.03s	29.84	30.09	29
31	71	51	60	22	43	55	M	M	0548	1820	Ra	M	0.03s	29.70	29.96
	77.1	48.1	62.6		41.5	M	M	M			M	M	0.55s	29.79	30.05
	M	M	M		M	M	M	M			M	M	M	M	M
	<--Monthly Averages														
	<--Monthly Totals-->														
	<--Departure From Normal-->														
	Greatest 24-hr Precipitation: 0.28s Date: 29-30														
	Greatest 24-hr Snowfall: M Date: M														
	Greatest Snow Depth: M Date: M														
	Number of Days with ----->														
	Max Temp >=90.0 Min Temp <=32.0														
	Max Temp <=32.0 Min Temp >=0.0														
	Thunderstorms : 0 Heavy Fog : 0														
	Sea Level Pressure Date (LST)														
	Maximum 30.32 16 0923														
	Minimum 29.62 01 0439														
	Precipitation >=.01 inch: 5														
	Precipitation >=.10 inch: 2														
	Snowfall >=1.0 inch: M														
	Data Version: VIER2														
	* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.														
	Degree Days	Monthly	Season to Date	Total	Departure	Total	Departure	Total							
	Heating:	M	M	M	M	M	M	M							
	Cooling:	M	M	M	M	M	M	M							

A 10

April 11, 2014

The Lemoore Navy News

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## NEED TO KNOW

# Important information about your drinking water

**From NAS Lemoore Public Works Department**

During a routine water sampling, coliform bacteria above Drinking Water Standards were found at NAS Lemoore.

This is not an emergency. If it had been, you would have been notified immediately.

Total coliform bacteria are generally not harmful. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Coliforms were found in more samples than allowed, and this was a warning of potential problems. Resamples were immediately taken and found to be within standards.

This is not an emergency; however, you have a right to know what happened, what you should do and what we are doing to correct this situation.

#### **What happened?**

Each month, we routinely take samples to monitor for the presence of drinking water contaminants. The standard is no more than one sample per month may show the presence of coliform bacteria.

In March 2014, twelve distribution samples were taken, with two of those samples showing the presence of coliform bacteria. The two sites were immediately retested, along with additional sites located nearby. All results were within California Department of Public Health standards, which are more stringent than United States Environmental Protection Agency (U.S. EPA) standards.

#### **What should I do?**

- You do not need to boil your water or take other corrective actions.

- Coliform is not normally a cause of serious illness; however, it can be an indicator of other bacteria. Whenever coliform bacteria are detected, follow-up testing is performed to ensure no other bacteria of greater concern, such as fecal coliform or E. coli, are present. We did not find any of these bacteria in our subsequent testing. If we had, we would have notified you immediately.

- People with severely compromised immune systems, infants, and some elderly, may be at increased risk. These people should seek advice about drinking water from their health care providers. If anyone has other health issues concerning the consumption of the water, you may wish to consult your doctor. General guidelines on ways to lessen the risk of infection by microbes are available from U.S. EPA's Safe Drinking Water Hotline at 1(800) 426-4791.

#### **Corrective Action:**

An additional six samples were collected and no coliform or bacteria of greater concern were found. No further actions are required.

Again, this is not an emergency, but you have a right to know what happened along with the subsequent actions.

For more information, please contact CDR Kevin Norton at (559) 998-4099 or at the following mailing address: 750 Enterprise Ave, NAS Lemoore, CA 93246.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

#### **Secondary Notification Requirements**

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- **SCHOOLS:** Must notify school employees, students, and parents (if the students are minors).
- **RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS** (including nursing homes and care facilities): Must notify tenants.
- **BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS:** Must notify employees of businesses located on the property.

**PROOF OF NOTIFICATION**  
(Return with copy of the Notice)

As required by Section 116450 of the California Health and Safety Code, I notified all users of water supplied by the Lemoore Naval Air Station of the failure to meet the **total coliform bacteria MCL** for the month of July 2010 as directed by the Department. At least one primary distribution method is required: mail, hand-delivery or newspaper publication. A second method is also required in order to reach persons not likely to be reached by a mailing, direct delivery or newspaper publication (renters, nursing home patients, prison inmates, etc.):

Notification was made on April 11, 2014.  
(date)

To summarize report delivery used and good-faith efforts used, please check all items below that apply and fill-in where appropriate:

- The notice was distributed by mail delivery to each customer served by the water system.
- The notice was distributed by direct delivery to each customer served by the water system.  
Specify direct delivery method(s) used: \_\_\_\_\_
- Publication of the notice in a local newspaper or newsletter of general circulation (attach a copy of the published notice, including name of newspaper and date published).
- Posted the notice at the following conspicuous locations served by the water system (if needed, please attach a list of locations). \_\_\_\_\_
- Posted the notice on the Internet at www.\_\_\_\_\_
- Other method used to notify customers. \_\_\_\_\_

**DISCLOSURE:** Be advised that Section 116725 and 116730 of the California Health and Safety Code state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for separate violation for each day that violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in the county jail not to exceed one year, or by both the fine and imprisonment.

Certified by Name and Title: CDR KEVIN NORTON, PUBLIC WORKS OFFICER  
Date: 4/18/14 Signature: K.N.

Due to the Dept. of Health Services within 10 days of notification to the public  
Total Coliform MCL Failure / Enforcement Action No.: \_\_\_\_\_